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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,565	03/27/2006	Kazuyuki Yamane	2006-0354A	7141

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EXAMINER	
ROBITAILLE, JOHN P	

ART UNIT	PAPER NUMBER
1791	

MAIL DATE	DELIVERY MODE
06/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,565	YAMANE ET AL.	
	Examiner	Art Unit	
	John P. Robitaille	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) *9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/04/2007 03/27/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is a first action on the merits in response to the mailing received on 02 March 2009. Claims 1-9 are pending.

Election/Restrictions

1. Claim 9 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 02 March 2009.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,853,639 (Kawakami et al., '639 hereafter) in view of U.S. Patent 6,245,437 (Shiiki et al., '437 hereafter).

4. Regarding claim 1, '639 teaches a process for producing a transparent multilayer stretched product, comprising: providing a resin including at least one layer of polyglycolic acid (PGA) resin, heat-forming and cooling the resin, reheating the laminate

until the polyglycolic acid resin layer is crystallized, and then stretching the re-heated resin laminate (C4L15-C4L25). '639 does not teach that the PGA is crystallized to opacity or that the PGA is part of a laminate.

5. Regarding the opacity of the PGA layer during the intermediate step, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to crystallize the PGA layer to opacity, since it has been held that a discovering an optimum value of a result effective variable involves only routine skill in the art. One would have been motivated to crystallize the PGA to full opacity for the purpose of ensuring crystallization of the PGA layer in order to impart gas barrier properties to the PGA layer. '639 teaches crystallization, without specifically stating % crystallization, in order to promote the barrier properties of the film. (See: In re Antonie 195 USPQ 233)

6. In the same field of endeavor, film production, '437 teaches the incorporation of a layer of PGA into a laminate sheet for the benefit of producing a film with the desired heat resistance and gas barrier properties. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of '639 with '437 for the benefit of producing a transparent film with heat resistance and transparency (ABSTRACT).

7. Regarding claim 2, '639 teaches that the resin laminate is transparent (C8L25).

8. Regarding claim 3, the previous art combination does not teach that the PGA is at most 10 wt.% of the laminate. It would have been obvious to one of ordinary skill in the art to use 10 wt. % or less PGA, since it has been held that discovering an optimum

value of a result effective variable involves only routine skill in the art. One would have been motivated to use at most 10 wt. % of PGA for the benefit of providing a film laminate with sufficient gas barrier properties and biodegradability.

9. Regarding claim 3, '639 teaches the PGA content of the film should be about 20 %wt. (C11L60-C11L65). It would have been obvious to one of ordinary skill in the art to reduce the amount of PGA 10 wt. % or less PGA, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. One would have been motivated to use at most 10 wt. % of PGA for the benefit of increasing the durability of the film.

10. Regarding claim 4, '639 teaches a process wherein the polyglycolic acid resin layer comprises a polyglycolic acid resin having a sufficiently high content of polymerized glycolic acid units as to exhibit a gas-barrier property (Table 2.).

11. Regarding claim 5, '639 teaches that the PGA comprises glycolic acid homopolymer (C3L54).

12. Regarding claim 6, the previous art combination does not teach the haze of the laminate. It would have been obvious to one of ordinary skill in the art to ensure that the haze of the laminate was at least 40% prior to stretching, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Because it was known at the time of invention that degree of haze is correlated to degree of crystallization (as taught by the attached non-patent literature entitled "polymer.htm"), one would have been motivated to ensure that the haze was at least 40% in order to ensure that the PGA was sufficiently crystallized.

13. Regarding claim 7, '639 does not teach an aromatic polyester resin layer.

14. In the same field of endeavor, resin films, '437 teaches the use of polyester terephthalate for the benefit of providing a base layer for the PGA layer to rest on. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of '639 and '437 for the benefit of providing a gas impermeable, shrink resistant film.

15. Regarding claim 8, '639 does not teach an additional biodegradable layer.

16. In the same field of endeavor,, films, '437 teaches the use of additional biodegradable layers (C3L65) for the benefit of minimizing the environmental burden of the resin laminate. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of '639 and '437 for the benefit of minimizing the environmental burden of the resin laminate.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Robitaille whose telephone number is (571) 270-7006. The examiner can normally be reached on Monday to Thursday from 8:00 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Del Sole can be reached on (571) 272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JPR

/Joseph S. Del Sole/

Supervisory Patent Examiner, Art Unit 1791